

SPRAYED PREFORMS FOR FORMING STRUCTURAL MEMBERS

ABSTRACT OF THE DISCLOSURE

A preform and method for forming preforms and structural members are provided. The preform can be formed by cold spraying a structural material onto a base member, such that the preform has dimensions approximating the dimensions of the machined structural member to thereby reduce material waste and machining time when forming the structural member from the preform. In addition, the preforms can be plastically deformed to more closely correspond with the desired dimensions of the structural member. Further, hydrogen can be provided in a mixed stream of gas and structural material for spraying, and the resulting structural member can be subjected to a sub-atmospheric pressure to release hydrogen therefrom.

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